



The Road Not Taken

Michigan's Highway Funding Decisions: Lessons from the Past and Implications for the Future

Michigan's trunkline highways are on the verge of rapid and serious decline. Already, pavement conditions have fallen for three consecutive years and its bridges are forecast to begin a long, steady decline that could return them to the deteriorated state last seen in the 1990s. Potholes are increasing, drivers are experiencing more miles of rough pavement and the gains in infrastructure condition made in the last 16 years are about to be lost.

The Michigan legislature is considering a revenue increase that would be the first since 1997 when the motor fuel tax was raised by four cents per gallon. The Michigan Department of Transportation commissioned a study⁽ⁱ⁾ of the uses of that increase and how its proceeds were invested. The study examines the path not taken after 1997: the lessons learned could influence current decisions on how to invest in Michigan's trunkline highways. The study concludes:

- MDOT could have achieved the state's pavement and bridge condition targets without bonding if the 1997 fuel tax increase had been nine cents per gallon instead of four.
- To meet the state's bridge and pavement condition targets without borrowing and sustain them to the present would have required another five cents increase, for a total of 14 cents per gallon.

In 1997, Michigan had among the worst road conditions in the country. Its bridges were ranked 49th out of 50 states in terms of their structural conditions. Nearly a third of trunkline pavements were in poor condition.

The four-cent per gallon increase enacted in 1997 was not adequate to pay for both system-expansion projects and preserve existing pavements and bridges. Yet more than \$900 million in new capacity projects desired by communities and businesses were funded in order to alleviate congestion and help the state's struggling economy.

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Of the four-cent increase, more than half of the funds went to local governments. Of the funds that did go to MDOT, only about a third went to "capital" purposes while the rest went chiefly to make bond payments, perform routine maintenance such as plowing snow, and address needs not eligible for federal highway funds. Only a portion was available to fund basic road repaving and the replacement of old bridges.

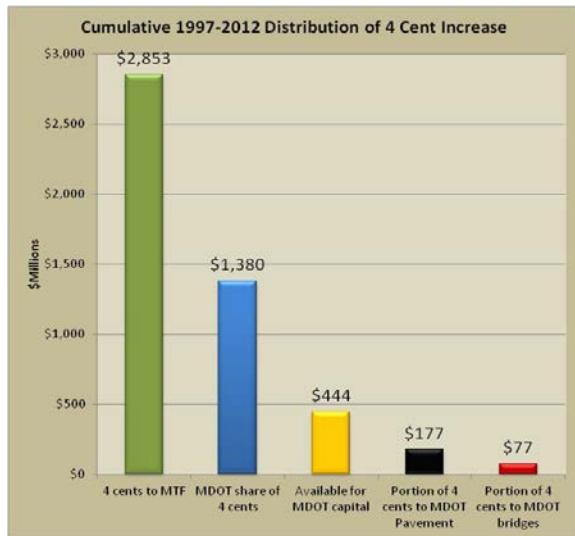


Figure 1 Uses of the 1997 4-cent increase.

Without adequate funds for pavement and bridge preservation, the department relied on bonds, borrowing nearly \$1.5 billion for pavement and bridge preservation work over the period. In fact, more than 28 percent of the pavement budget in recent years came from bonds or one-time federal economic-stimulus funds. Today, the department is just under the ceiling set on its debt limit and is unable to continue borrowing.

Gas tax revenue continues to decline, debt service costs MDOT more than \$220 million in principal and interest annually, and additional bonding is no longer possible. For these reasons, the department faces a serious drop in its pavement budgets. As a result, conditions are forecast to decline rapidly for pavements and gradually for bridges.

The impending decline in pavement and bridge conditions would reverse 16 years of progress. From 1997, the department steadily focused on improving its highway infrastructure. Its bridges improved from 49th to 20th nationally, in line with the national average. Pavement conditions also steadily improved through 2009, when nearly 90 percent of pavements met the condition targets.

Now, however, the forecasts are that by 2016, pavements will be in about the same deteriorated state as they were in 1997. Pavement and bridge budgets, when discounted for the effects of inflation, will be at their lowest levels since 1997.

The long-term costs to restore bridges and pavements to good condition will increase once they become deteriorated. Accidents also tend to increase on poor pavements because the surface provides less friction, which increases rear-end and run-off-the road crashes.

The lessons from 1997 are that any new investment for the trunkline system should be adequate to ensure the long-term condition of its bridges and pavements. The 1997 increase clearly was inadequate and did not create sustainable highway conditions. That inadequacy is evident in the amount of bonding that was necessary and in the rapid decline in budgets and conditions that are forecast for the next few years.

As investment decisions are made in 2013, it is clear that substantial new revenue for the preservation of Michigan's basic highway conditions is needed. It also is clear that another modest increase such as 1997's will have only limited impact. To ensure that Michigan has a highway network that is sustainable for the long term will require a substantial investment significantly greater than in 1997. Otherwise, Michigan will be on a path to return to the pot-holed pavements and load-limited bridges of the 1990s.

ⁱ Proctor, Gordon, Shobna Varma and William Roberts, *The Road Not Taken - Michigan Highway Funding Decisions: Lessons from the Past and Implications for the Future*, May 2013.